AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 - 16. (Canceled)

17. (Currently Amended) A receiver circuit, comprising:
an optical reception device; and
an amplifier connected to said reception device;
said amplifier having a gain; and
said amplifier including at least one control terminal for changing said gain of said amplifier between at least two gain values, wherein at least one of the at least two gain values is optimized for maximum sensitivity.

18. (Previously Presented) The receiver circuit according to claim 17, wherein said amplifier is a transimpedance amplifier.

19. (Previously Presented) The receiver circuit according to claim 17, wherein said amplifier has a feedback impedance for influencing said gain of said amplifier.

20. (Previously Presented) The receiver circuit according to claim 19, wherein said feedback impedance has an impedance value that is set by a signal at said control terminal.

21. (Previously Presented) The receiver circuit according to claim 20, wherein said feedback impedance has a resistance value that is set by a signal at said control terminal.

22. (Previously Presented) The receiver circuit according to claim 20, wherein:
said feedback impedance is formed by an impedance network with at least one switching device that is switched by said signal at said control terminal; and

said switching device alters said impedance of said feedback impedance when said switching device is switched.

23. (Previously Presented) The receiver circuit according to claim 22, wherein said switching device is formed by a switching transistor.

24. (Previously Presented) The receiver circuit according to claim 23, wherein said switching transistor is a MOS-FET transistor or a bipolar transistor.

25. (Previously Presented) The receiver circuit according to claim 19, wherein:

said feedback impedance is formed by an impedance network with at least one variable impedance that can be set at least approximately linearly within a predetermined impedance range by a signal at said control terminal.

26. (Previously Presented) The receiver circuit according to claim 25, wherein said variable impedance is formed by a transistor.

27. (Previously Presented) The receiver circuit according to claim 26, wherein said variable impedance is formed by a MOS-FET transistor or a bipolar transistor.

28. (Previously Presented) The receiver circuit according to claim 17, wherein said reception device is a photodiode.

29. (Previously Presented) The receiver circuit according to claim 17, further comprising:

a package for packaging said optical reception device (20) and said amplifier;

said package being a TO-46 package, a TSSOP10 package, or a VQFN20 package.

30. (Previously Presented) The receiver circuit according to claim 29, wherein said package has a terminal pin forming said control terminal.

31. (Currently Amended) A method for operating an optical receiver circuit, the method which comprises:

prescribing a gain value for an amplifier of the receiver circuit in dependence on a bandwidth prescribed for the receiver circuit;

determining the gain value in accordance with an equation:

$$V = K / B,$$

K specifying a maximum achievable bandwidth-gain product previously determined for the receiver circuit and B denoting the bandwidth prescribed for the receiver circuit;

setting the gain value of the amplifier at a control terminal of the amplifier; and

after setting the gain value of the amplifier, using the amplifier to amplify an output signal of an optical reception device.

32. (Canceled)

33. (New) A receiver circuit, comprising:

an optical reception device;

an amplifier connected to said reception device, said amplifier having a gain, and said amplifier including at least one control terminal for changing said gain of said amplifier between at least two gain values; and

a package for packaging said optical reception device (20) and said amplifier, said package being a TO-46 package, a TSSOP10 package, or a VQFN20 package.